With a simple science experiment, help your students understand how caves form. Give each student six ounces of clay and a dozen sugar cubes. The clay will represent sandstone, a hard rock, and the sugar, limestone. Working on a newspaper-covered surface, students should mold the clay around the sugar cubes, being careful to leave at least part of a sugar cube exposed. By arranging the sugar cubes, they will be determining the shape of their caves. When students have finished constructing the caves, leave the caves to dry for several days, and then soak the structures in water. The sugar will dissolve, leaving the hollowed out spaces.

http://teacher.scholastic.com/lessonrepro/lessonplans/theme/caves01.htm